

ROKOSZ, Andrezej; DYREK, Mieczyslaw

Reliability of determining sodium and potassium in a mixture of
chlorides according to J. Tokarski's method. Chem anal 4 no.4:
705-713 '59. (EAI 9:6)

1. Katedra Chemii Nieorganicznej Uniwersytetu Jagiellonskiego,
Krakow.

(Salt)

(Potassium chloride)

ROKOTOVA, N.A.; VORONIN, L.G., zaveduyushchiy.

Formation of temporary association in dogs under the effect of traces of indifferent stimuli. Trudy Inst.fiziol. 1:35-42 '52. (MIRA 6:8)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'nosti.
(Conditioned response)

ROKOTOVA, N.A.

Effect of certain indifferent stimuli on formation of temporary connections in the cerebral cortex. Zh. vysshei nerv. deiat. 2 no.5: 753-759 Sept-Oct 1952. (CMLL 23:4)

1. Institute of Physiology imeni I. P. Pavlov of the Academy of Sciences USSR.

ROKOTOVA, N.A.

Temporary connections resulting as a reaction to indifferent stimuli
in anthropoids (chimpanzee). Trudy Inst.fiziol. no.2:289-294 '53.
(MIRA 7:5)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'nosti
(zaveduyushchiy - L.G.Voronin).
(Conditioned response)

ROKOTOVA, N.A.

Conditioned investigative reflexes in chimpanzees. Trudy Inst.fiziol.
no.2:295-305 '53. (MLRA 7:5)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'nosti
(zaveduyushchiy - L.G.Voronin). (Conditioned response)

ROKOTOVA, N.A.

Mobility of neural processes in anthropoids. Trudy Inst.fiziol.
no.2:384-397 '53. (MLRA 7:5)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'nosti
(zaveduyushchiy - L.G.Voronin). (Nervous system--Mammals) (Apes)

signalling significance of the movement, but the extinction of the 3rd components or their replacement (alternatively or together)

Rakotova, N.A.

by a pause, is practically without effect on the chain reflex. He-
signalling significance of the 1st component

"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001445210002-2

by movement. (Russian)

2/2

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001445210002-2"

ROKOTOVA, N.A.
ROKOTOVA, N.A.

Physiologic mechanisms of temporary bonds to indifferent stimuli.
Zhur.vys.nerv.deiat. 4 no.4:516-525 JI-Ag '54. (MLA 8:3)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'no-
sti Instituta fiziologii im. I.P.Pavlova Akademii nauk SSSR.
(REFLEX, CONDITIONED,
temporary bonds to indifferent stimuli)

ROKOTOVA, N.A.

Chain conditioned motor reflexes in dogs. Zhur.vys.verv.deiat.
no.6:833-841 N-D '54. (MIRA 8:7)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'-
nosti Instituta fiziologii im. I.P.Pavlova Akademii nauk SSSR.

(REFLEX, CONDITIONED,
chain motor reflexes in dogs)

ROKOTOVA, N.A.

Methodology of determining the type of nervous system in man.
Fiziol. zhur. 40 no.6:727-729 M-D '54. (MLRA 8:2)

1. Institut fiziologii im I.P.Pavlova AN SSSR.
(NERVOUS SYSTEM, function tests,
determ. of type of nervous system in man)

ROKOTOVA, N.A.

Physiological mechanism used in differentiating basic conditioned signals related to different conditioned reactions. Zhur.vys.nerv. deiat.5 no.3:385-392 My-Je '55. (MLRA 8:10)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'nosti Instituta fiziologii im. I.P.Pavlova Akademii nauk SSSR.
(REFLEX, CONDITIONED, differentiation of basic conditioned signals related to various conditioned reactions)

BUKHOVETS, G.I.; KUZ'MENKO, G.N.; NIKITINA, A.M.; ROKOTOVA, N.A.

Determining the type of the higher nervous system in man. Uch.zap.
Ped.inst.Gerts. 1083-11. '55. (MLRA 10:3)
(TEMPERAMENT)

ROKOTOVA, M. A., Doc of Bio Sci -- (diss) "Nerve mechanisms 'voluntary' of motion." Leningrad, 1957, 32 pp (Moscow State University im Lomonosov) 110 copies (KL, 35-57, 106)

KOLOGRIVOVA, Yu.G.; ROKOTOVA, N.A.

Irradiation and concentration of the excitation process in the motor
analysor. Trudy Inst. fiziol. 6:277-285 '57. (MIRA 11:4)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'nosti
(zaveduyushchiy L.G. Voronin).
(CONDITIONED RESPONSE)

BOHOTOVA, N. A. and T. M. GORBUNOVA

"The Influence of Small Doses of Ionizing Radiation on the State of Biological Objects."

report presented at the Conference on Influence of Ionizing Radiation upon the Higher Developed Parts of the Central Nerve System, Inst. of Higher Nervous Activity, AS USSR. ■ 6-10 May 1958.

AUTHORS: Rokotova, N. A., Gorbunova, I. M. 20-119-5-57/59

TITLE: On Reflectory Changes in the Motor Activity of the Small Intestine Under the Influence of Chemical Stimulating Substances and of β -Rays Upon Its Mucous Membrane (O reflektor-nykh izmeneniyakh motoriki tonkogo kishechnika pri vozdeystvii na yego slizistuyu khimicheskikh razdrazhiteley i beta-luchey)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 5, pp. 1046 - 1049 (USSR)

ABSTRACT: Publications on this problem are very scarce (References 1,2). The authors in the present paper tried to investigate the reflectory reactions due to the stimulation of the mucous membrane on the basis of another, functionally nearer index, namely on the basis of the motor activity of the same portion of intestine. They used 32 cats for this. A portion 4-6 cm in length was separated from the small intestine, where vessels and nerves were spared. The portion of intestine was slit up in a longitudinal direction, inverted and the slit was sewn together. Solutions of acetylcholine, KCl, NaH_2PO_4 and alcohol of different concentrations were used for stimulation. After

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20-119-5-57/59

On Reflectory Changes in the Motor Activity of the Small Intestine Under the Influence of Chemical Stimulating Substances and of β -Rays Upon its Mucous Membrane

ASSOCIATION: Institut fiziologii im. I. P. Pavlova Akademii nauk SSSR
(Institute for Physiology imeni I. P. Pavlov AS USSR)

PRESENTED: January 27, 1958, by K. M. Bykov, Member, Academy of Sciences, USSR

SUBMITTED: January 5, 1958

Card 3/3

AUTHORS: Gorbunova, I. M., Rokotova, N. A. SOV/20-120-4-65/67

TITLE: Conditioned Reflexes in Dogs Subjected to Local β -Irradiation of Strictly Limited Areas of Their Skins or Mucous Membranes (Uslovnyye refleksy u sobak pri mestnom beta-obluchении ograni-chennykh uchastkov kozhi ili slizistoy)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 4, pp. 922 - 925 (USSR)

ABSTRACT: As is known ionizing radiation (mainly referred to as X-rays) causes changes of the reflex activity under certain conditions (Refs 1-3, 7,8 and others). Most observations are concerned with a suppression of the reflex which lasts for several days after the irradiation. The direct causes of the reflex changes under certain conditions become unclear in the course of a long latent period. The investigations of this influence do not sufficiently clarify the mechanisms which are inserted in the realisation of the conditioned reaction reflex in the case of an influence of ionizing radiation. In the case of total irradiation the question cannot be answered whether the radiation exerts an influence on the receptors, conductors or centers.

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Conditioned Reflexes in Dogs Subjected to Local β - SOV/20-120-4-65/67
-Irradiation of Strictly Limited Areas of Their Skins or Mucous Membranes

Furthermore the commonly applied doses damage various tissues and systems and lead to radiation diseases. The investigations were carried out with 3 dogs. They showed certain motoric nutritional reflexes. A small part of the skin of the animals' thighs or intestinal mucosa was irradiated with soft β -radiation. For this purpose a flat applicator of p^{32} - β -radiation was used. Thus those layers of the skin surface were irradiated where the receptor endings lie. All other tissues were not irradiated. The applied doses were selected in such a way (equivalent to 2 r) that no damages of tissue could be caused. From the results of the experiments the following conclusions may be drawn: 1) β -irradiation of mentioned intensity exerts an influence on the receptors of the skin or of the mucosa and changes the state of the conditioned reflex of the irradiated surface. 2) As a result of such an irradiation an irritation of the receptors takes place which in case of a repeated influence of a mechanical irritation passes into the state of hypoliminal inhibition (zapredel'noye). The influence of a locally applied β -irradiation upon the conditioned reflexes is directly caused by changed

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Conditioned Reflexes in Dogs Subjected to Local SOV/20-120-4-65/67
 β -Irradiation of Strictly Limited Areas of Their Skins or Mucous Membranes

reflexes of the irradiated surfaces. There are 4 figures and 9 references, 8 of which are Soviet.

ASSOCIATION: Institut fiziologii im.I.P.Pavlova Akademii nauk SSSR
(Institute of Physiology imeni I.P.Pavlov AS USSR)

PRESENTED: January 29, 1958, by K.M.Bykov, Member, Academy of Sciences, USSR

SUBMITTED: January 29, 1958

1. Skin--Effects of radiation
2. Beta rays--Physiological effects
3. Intestine--Effects of radiation

Card 3/3

GORBUNOVA, I.M.; ROKOTOVA, N.A.

Analysis of the mechanisms of disturbance of the conditioned reflex function of the central nervous system due to ionizing radiation.
Trudy Inst.fiziol. 8:254-260 '59. (MIRA 13:5)

1. Laboratoriya nevro-fiziologicheskikh problem (zaveduyushchiy - K.M. Bykov [deceased] Instituta fiziologii im. I.P. Pavlova AN SSSR.

(CONDITIONED RESPONSE)

(BETA RAYS--PHYSIOLOGICAL EFFECT)

ROKOTOVA, N.A.; GORBUNOVA, I.M.

Reflexogenic functions of iliofemoral veins. Fiziol.zhur. 45 no.9:
1110-1117 S '59. (MIRA 13:1)

1. Laboratoriya nevrofiziologicheskikh problem Instituta fiziologii
im. I.P. Pavlova AN SSSR, Leningrad.
(BLOOD PRESSURE physiol.)
(ILIAC VEIN physiol.)
(FEMORAL VEIN physiol.)

ROKOTOVA, N.A.; GORBUNOVA, I.M.

Reflexogenic function of the femoroiliac veins. Fiziol.zhur. 46
no.1:71-77 Ja '60. (MIRA 13:5)

1. From the laboratory of neurophysiological problems, I.P.
Pavlov Institute of Physiology, Leningrad.
(FEMORAL VEIN physiol.)
(ILIAC VEIN physiol.)
(BLOOD PRESSURE physiol.)

S/865/62/002/000/028/042
D405/D301

AUTHORS: Rokotova, N.A., Kucherenko, T.M., Pavlov, V.N. and Trokhachev, A.I.

TITLE: Effect of sleep loss on some aspects of higher nervous activity of humans

SOURCE: Problemy kosmicheskoy biologii. v. 2. Ed. by N. Siskyan and V. Yazdovskiy. Moscow, Izd-vo AN SSSR, 1962, 273-286

TEXT: The authors investigated the effect of a sleepless night on the task of learning a working program with switches. Four young male adults (volunteers) participated in the experiments; they were awake for 24 hours (6 to 10 times, with intervals of a few days between each experiment). The subjects were placed in a separate room, around a table with four switches. The experiment involved switching off a signal lamp by means of one of the switches. The signal lamp was switched on by the experimentator in accordance with a pre-determined program. The answers of the subject are eval-

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D405/D301

Effect of sleep loss ...

uated by the time it takes to solve the problem, by the ratio of number of answers to number of signals, and by the agreement between the frequency of selecting a particular switch and the frequency given by the programme. Each experiment with the signal lamp lasted 40-60 minutes. The programs used were of two types: rigid and free. The subjects came to the experiments after a normal day of studies. The tests with the signal lamp were conducted in the evening and in the following morning (at 7 o'clock). Between the two program tests the subjects were continuously busy with observations, making entries into copybooks (each minute), etc. The overall results of the dynamics of learning of the four subjects are represented in the form of curves, characterizing the rate of change of the average time required for the solution, the number of errors, and the probability of choice of switches with increasing number of trials. The sleepless night affected only the time required for the solution of the problem in case of the rigid program, whereas the accuracy was not affected. In case of the free (stochastic) program, the quality suffered also, i.e. the problems remained unsolved, although some progress towards a solution was noted. Conclusions: A method was

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Effect of sleep loss ...

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D405/D301

developed for the study of the functions of the higher nervous system of adults; this method permits the analyzing of both determinate and stochastic forms of conditional reflex relations. Two types of programs were used: rigid (stereotype with probabilistic elements), and free (a stochastic model with 4 choices). The effect of sleep loss on both forms of learning was investigated. Twenty four hours of sleeplessness led to a slowing down in learning by the rigid program and to incomplete learning by the free program. There are 4 figures and 2 tables.

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S/865/62/002/000/042/042
D405/D301

AUTHORS: Rokotova, N.A., Bogina, I.D., Bolotina, O.P.,
Kucherenko, T.M., Rogovenko, Ye.S. and Sheykin, R.L.

TITLE: Effect of prolonged limitation of motor activity on
vital functions in monkeys

SOURCE: Problemy kosmicheskoy biologii. v. 2. Ed. by N. Sisa-
lyan and V. Yazdovskiy. Moscow, Izd-vo AN SSSR, 1962,
417-427

TEXT: The experiments were conducted on four monkeys (of
three different types). The first experimental series lasted for
10 days and the second for 3 $\frac{1}{2}$ months. The experiments were conduct-
ed in two different models of fixators: one designed by Lilly and
Mason, and the second by R.L. Sheykin. The pulse and respiration
rates were determined, as well as the weight of the monkeys prior
to, and after the experiments. It was found that prolonged limita-
tion of motor activity has no harmful effect on the physiological
functions of the monkeys, their behavior and the state of their ner-

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Effect of prolonged limitation ...

S/865/62/002/000/042/042
D405/D301

vous system. During the first 2-4 days of restricted motion some (insignificant) changes in sleeping time and a depression in the orienting reflex were observed. These effects did not last long and after 3-5 days already the functions of the animals returned to normal. Monkeys, kept in a fixator, can serve as valuable objects for further investigations. The amount of food consumed by the animals dropped by 26-50%, whereas the composition of the diet remained practically unchanged. The weight of the monkeys increased sharply (by about 50%) during a fixation period of $3\frac{1}{2}$ months. The pulse and respiration rates were not appreciably affected. The hair and skin were in a good state. The apparatus developed by Sheykin proved to be more advantageous than that of Lilly and Mason. There are 5 figures and 4 tables. The most important English-language references read as follows: Lilly J.C.F. Appl. Physiol., 12, 1 1958 and Mason J.W.F. Appl. Physiol. 12, 1, 1958.

Card 2/2

KUCHERENKO, T.M.; ROKOTOVA, N.A.

Course of convulsions caused by corazole in rats at different times after exposure to ionizing radiation. Radiobiologiya 3 no.1:71-75 '63. (MIRA 16:2)

1. Institut fiziologii im. I.P. Pavlova AN SSSR, Leningrad.
(X RAYS—PHYSIOLOGICAL EFFECT) (METRAZOLE)
(CONVULSIONS)

L 22552-66 EWT(1' SCTB DD

ACC NR: AT6003901

SOURCE CODE: UR/2865/65/004/000/0631/0641

AUTHOR: Rokotova, N. A.

ORG: none

TITLE: Methods by which a sequence of actions is formed in man

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii, v. 4, 1965, 631-641

TOPIC TAGS: applied psychology, space psychology, motor activity, learning mechanism

ABSTRACT: The article reports on an experiment in which human subjects (whose ages ranged between 17 and 25) were instructed to turn off a bulb whenever it flashed. The bulb could be turned off by one of 8 keys on the panel. The order of "correct" keys was determined by a previously prepared program. The subjects did not know beforehand any of the characteristics of the program so that they had to learn the regular shifts from key to key, the length of the program, and the arrangement of the individual keys during the experiment. Each of the 18 subjects in the main experiment--which was to determine the possibility of correct duplication of the sequence--was able to carry out any number of searches to find the "correct" key and to do so in any order. Fifteen subjects learned how to duplicate without error the program of 20 shiftings from key to key, requiring on the average 34 repetitions of the sequence. Orig. art. has: 3 tables, 2 figures.

SUB CODE: 06/

SUBM DATE: 00/

ORIG REF: 001/

OTH REF: 004

Card 1/1 *OK*

L 11373-67 EWT(1) SCTB DD/GD

ACC NR: AT6036500

SOURCE CODE: UR/0000/66/000/000/0068/0069

AUTHOR: Bogina, I. D.; Gorbunova, I. M.; Rogovenko, Ye. S.; Rokotova, N. A.

ORG: none

TITLE: Psychophysiological characteristics of a sequence of movements in man [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 68-69

TOPIC TAGS: psychophysiology; space psychology, man machine communication

ABSTRACT: The problem of the present study was to obtain evidence of the creation of human internal criteria during action-sequence instruction and to observe the process of obeying these criteria. Tests took place on experimental panels with switches and keys; subjects were instructed and then ordered to repeat various predetermined sequences which consisted of pressing and transferring the hand. The tests were conducted on healthy adult volunteers of both sexes aged 17-45, with intermediate or higher education.

Cord 1/3

L 11373-67

ACC NR: AT6036500

In tests on 16 subjects, instruction for a sequence of 8 and 16 switch applications was studied (panel with 12 switches) using a search method and the free selection of each action from any three. During instruction it was noted that subjects choose the type of action sequence which occurs when the direction of hand transfer is constant. In tests on 75 subjects, it was found that the preceding direction of hand motion dictates the choice of the subsequent action.

Results of these tests indicate that the process of instructing action sequence is a process of choice and the development of internal criteria, which in these tests was the direction of motion of the hand over the panel.

In tests on 30 subjects, the execution rate of a preinstructed sequence of maneuvers using panel switches and the speed of hand percussion on a panel key were studied. It was found that the time required to execute one motor cycle in a free choice situation is maintained at a high level (mean error does not exceed 0.01 of the value of the mean relative error; $\frac{\sigma}{\bar{x}} \cdot 100$ fluctuates from 2—5%). Analysis of these data revealed a complete conformance with MacGill's model, which considers the

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L 11373-67

ALL NRI AT6C36500

operation of a mechanism generating a time interval. It was also observed that the fluctuation of intervals corresponds to fluctuations at the output of a system provided with feedback assuring error compensation.

These studies indicate that one internal criterion which controls action sequence is the time interval taken to complete a motor cycle and that a uniform speed of motion is associated with the process of conforming to this interval. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06, 05 / SUBM DATE: 00May66

Card 3/3

ACC NR: AT6003864

SOURCE CODE: UR/2865/65/004/000/0308/0315

AUTHOR: Bogina, I. D.; Rokotova, N. A.; Rogovenko, Ye. S.; Sheykin, R. L.

ORG: none

TITLE: Effect of partial limitation of motor activities on basic physiological processes in monkeys

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii, v. 4, 1965, 308-315

TOPIC TAGS: respiration, brain, animal physiology, experiment-animal, space flight simulation, space physiology, weightlessness, physiologic parameter

ABSTRACT: Experiments with partial restraint of monkeys have been performed during the last two years because under weightless conditions partial restraint of humans and animals has become the standard form of existence during spaceflight. In the authors' laboratories, a restraint system designed by Sheykin, which consists of a restraining collar, a belt, and either a seat (for the macaque monkey) or a foot rest (for the capuchin monkeys), was used.

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ACC NR: AT6003864

The first series of experiments was performed on four monkeys for the purpose of determining the effects of prolonged, partial restraint of motor activity on the circadian rhythm of behavior, on the appetite, and the orienting reflex. The monkeys showed an insignificant diminution in the duration of sleep and a depression of the orienting reflex only during the first two to four days after the beginning of the experiment. Their appetite remained good during the entire period of restraint (10 days to 4 months). Daily medical examinations failed to reveal any pathological results of prolonged restraint. After the monkeys were freed from restraint they experienced a certain difficulty in walking. When sitting on a shelf they tried to assume the pose in which they had been restrained. After prolonged restraint (4 months) there was a certain loss of spatial orientation, which manifested itself in the inability of the monkeys to estimate distances properly when jumping. However, all these consequences of restraint disappeared after 2—3 hours. Tests showed that there was no change in sexual drives as a result of prolonged restraint.

The purpose of the second series of experiments was to study diurnal variations in respiratory rhythm, cardiac activity, and bioelectrical activity of the brain of restrained monkeys. Experiments were performed on two capuchin and one macaque monkey. Special features were added to

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I 0012-86
ACC NR: AT6003864

Sheykin's restraint system for recording respiration, motor activity, EKG, and EEG. Data from the experiments indicated that changes in the frequency of respiration, in general, were related to motor activities of the monkeys. Respiration in monkeys fluctuated between 32 and 47 cycles per min. Frequency of respiration tended to diminish during the night hours when the monkeys slept. Data obtained two weeks after the beginning of the experiment did not vary much from results obtained during the first three days. Pulse frequency in the macaque monkey ranged from 120 to 160 cps, and in the capuchin from 200 to 250 cps. External stimulation (a rhythmic flashing light) caused the pulse to rise somewhat; in the macaques, for example, it went up to 200 cps. During the course of the experiment the pulse rate tended to remain steady. Restrained macaque monkeys at rest tended to exhibit an alpha-like rhythm with a frequency of 8-12 cps and an average amplitude of 90-95 μ v. Light stimulation of the eyes caused a distinct inhibition of this rhythm. Capuchin monkeys show a characteristic delta-like rhythm with a frequency of 25-35 cps and an average amplitude of 70 μ v. The bioelectrical activity of the brain of the monkeys did not show any variations during the period of their restraint. The data obtained in these experiments indicate that under conditions of partial restraint, the respiration, heart beat, and bioelectrical activity of the brain remain within normal limits for the duration of the period of restraint. A comparison of the results of these experiments with those found in the literature

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ACC NR: AT6003864

indicates that prolonged restraint has certain advantages over comparatively short-term restraint. The relative stability of physiological indices obtained during prolonged restraint indicates that animals in limited-restraint systems could be used as subjects in space-flight experiments. Orig. art. has: 3 figures. [ATD PRESS: 4091-F]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 003

Card

4/4

BOGINA, I.D.; ROKOTOVA, N.A.; ROGOVENKO, Ye.S.; SHEYKIN, R.L.

Effect of partial limitation of motor activity on basic physiological processes in monkeys. Probl. kosm. biol. 4:308-315 '65.
(MIRA 18:9)

ROKOTOVA, N.A.

Ways of the formulation by man of the consecutiveness of action.
Probl. kosm. biol. 4:631-641 '65. (MIRA 18:9)

ROKOTOVA, N.A.

Some elements of the organization of sequence of actions in the solution of "Finding the way in a maze" problem by man. Vop. psikhol. 10 no.2:112-124 Mr-Ap '64.

(MIRA 17:9)

1. Institut fiziologii imeni I.P. Pavlova AN SSSR, Leningrad.

ROKOTOVA, N.A.; BOGINA, I.D.; BOLOTINA, O.P.; KUCHERENKO, T.M.;
ROGOVENKO, Ye.S.; SHEYKIN, R.L.

Effect of prolonged limitations of the motor activity on vital
activities in monkeys. Probl.kosm.biol. 2:417-427 '62.
(MIRA 16:4)

(SPACE MEDICINE)

KOTIS, V.I.; ROKOTYON, I.S.

Calculation of the distribution of active power between the stations of a heat and electric power system using the "Ural-1" digital computer. Trudy MEI no.54:227-252 '64.

(MIRA 17:12)

ROKOTYAN, I.T.

Mobile streptococci. Zhur. mikrobiol., epid. i immun. 43 no. 1:
123-125 Ja '66 (MIRA 19:1)

1. Tashkentskiy meditsinskiy institut. Submitted November 10,
1963.

ROKOTYAN, S. A., ENG.

United States - Electric Lines

Project of a 300 kv electric transmission line. Elektrichestvo No. 9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclass.

181T33

ROKOTYAN SS

USSR/Electricity - Transmission Lines
Clamps

Jan 51

"Release Clamps for Electrical Transmission Lines,"
S. S. Rokotyan, B. V. Sololov, A. N. Sherentsis,
Engineers, "Teploelektroproyekt"

"Elektrichestvo" No 1, pp 60-64

Discusses constr of release clamps. Anal of their
operation in elec power systems of Min of Elec Power
Sta shows their use is effective from economic
standpoint. Submitted 17 Aug 50.

181T33

ROKOTYAN, S. S.

"Rules for the Construction of Electrical Engineering Installations," Elektrichestvo,
No. 12, 1950.

Engr., Thermoenergetics Project., Electric Power Stations, -c1950-.

ROKOTYAN, S. S.

USSR/Electricity - Literature

Feb 52

"The 400-kv Transmission Line Project in the Ruhr Region," S. S. Rokotyan, Engr

"Elektrichestvo" No 2, pp 85-88

Review of literature on the German plan for a 400-kv transmission line which was to connect proposed hydroelec power plants in the Austrian Alps with the Ruhr region. Concludes that plan as a whole was poor and included many technical errors, e.g., grounding of the 400-kv null point through compensating coils, poor transformer construction, etc.

208737

ROKOTYAN, S. S.

PA 237T24

USSR/Electricity - Transmission Lines

Jul 52

"Kuybyshev-Moscow 400-KV Electric-Power Transmission Line," Engrs A. V. Mirolubov and S. S. Rokotyan, Moscow

"Elektrichestvo" No 7, pp 5-10

Relates basic technical decisions made in planning transmission line (2 parallel circuits) from Kuybyshev Hydroelectric Power Station to Moscow. Describes measures to insure required level of line stability; cites initial data detg line insulation level and eng parameters for 400-kv line and substation equipment. Includes sketches and tables of pole and cable characteristics, graphs and chart of elec characteristics.

237T24

ROKOTYAN, S. S.

Avarii Na Gornykh Liniyakh Elektropredachi Vyzvannyye Padeniyem Lavin. Elektrichestvo
No. 4, 1952.
Inzh.

SO: Monthly List of Russian Accessions, Library of Congress, August 1952 ~~1~~, Uncl.

ROKOTYAN, S. S., ENG.

Electric Lines

New equipment for longitudinal compensation of a transmission line. Elektrichestvo
no. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 195~~3~~₂, Uncl.

ROKOTYAN, S. S., ENG.

Electric Lines - United States

Project of a 300 kv electric transmission line. Elektrichestvo no. 9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

ROKOTYAN, S.S., inzhener.

Project of a British 275 Kv high voltage network. Elektrichestvo no.10:87-90
0 '53. (MIRA 6:10)

(Great Britain--Electric networks) (Electric networks--Great Britain)

ROKOTYAN, Sergey Sergeyevich; ZHUKOV, L.A., redaktor; SKVORTSOV, I.M.,
tekhnicheskii redaktor

[Long-distance transmission of electric power] Peredacha elektricheskoi
energii na dal'nie rasstoianiia. Moskva, Gos. energ. izd-vo, 1956.
77 p. (MLRA 9:12)

(Electric power distribution)

ROKOTYAN, S.S.

GRIGOR'YEV, Yuriy Yevgen'yevich; GUL'DENBAL'K, Vadim Vladimirovich;
LEVITSKIY, Konstantin Konstantinovich; ROKOTYAN, S.S., re-
dakter; GORTINSKIY, S.M., redakter; VORONIN, K.P., tekhnicheskii
redakter.

[Construction of the Soviet Union's first long distance 400
kilovolt electric transmission line] Stroitel'stvo pervoi v
Sovetskom Soiuze dal'nei elektropredachi 400 kv. Pod red. i
s prediel. S.S. Rokotiana. Moskva, Gos. energ. izd-vo, 1956.
86 p. (MIRA 10:6)

(Electric lines)

Rokotyan, S.S.

621.315.051(47)

✓ 2923. 400 kV POWER TRANSMISSION LINES IN THE
SOVIET UNION. S.S. Rokotyan and V.N. Sergeyev.
Elekt. Stantsii, 1958, No. 2, 31-6. In Russian.

elec
eng
Two parallel single-circuit lines have been constructed from Kuibyshev to Moscow on a route of 1000 km for the transmission of 1150 MW. In order to increase stability limits, the generators and synchronous capacitors at the receiving end have high-speed electronic voltage regulators, the line has 3 intermediate switching stations, clearing faults within 0.10-0.12 sec; 30-40% of the line reactance is compensated by series capacitors, made up of 50 kVA, 600 V units. Load resistors are automatically connected to the generators during faults and the 400 kV transformer neutral at the sending end is earthed across suitably chosen resistors. Each phase of the line consists of 3 S.C.A. (1 : 8) conductors of 480 mm² aluminium section (332 mm² in the Moscow ring), spaced 400 mm. Spacing between phases is 10.5 m. The steel weight of the flexible supports has been reduced to 7.5-9 tons by the use of steel cables for the longitudinal force in case of con-

"APPROVED FOR RELEASE: 06/20/2000

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weight of 19-30 tons, according to angle and climatic con-

1/2

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001445210002-2"

Rokotyan, S. S., Sergeev, V. N.

ditions. The average steel weight for the entire route is 27 ton/km including the river crossings and the approaches to Moscow with relatively more rigid supports. It is only 20.5 and 24.5 ton/km in the main part of the route in the climatic zones I and II. Considerable economy has been achieved through simplified design, especially of the foundations, and erection methods with a high degree of mechanization.

F. Busemann

212

105
212

Rokotyan, S.S.

1877. 400 kV POWER TRANSMISSION SCHEME STALINGRAD
DAM-MOSCOW. S.S. Rokotyan.
Elektr. Stantsii, 1956, No. 8, 30-4. In Russian.

This 1000 km scheme for the transmission of 1100 MW/
 5.7×10^6 kWh per yr, has two 400 kV single-circuit lines with bundle
conductors (480 mm² Al and 60 mm² Fe), consisting of three conduc-
tors per phase, at 60 cm spacing. Three intermediate stations are
provided for stabilisation, connection of regional power systems and
reactive power compensation. Details are given of the insulation
coordination and of the design, construction and erection of the line.
A comparison of weight, dimension and cost of different reinforced-
concrete foundations is given. F. Busemann

1878. TRANSMISSION CAPACITY AND STABILITY OF THE
400 kV STALINGRAD DAM-MOSCOW POWER TRANSMISSION
SCHEME. D.I. Azarov.
Elektr. Stantsii, 1956, No. 8, 34-9. In Russian.

See preceding Abstract. Discusses results of an investigation
of economic measures for improving the stability of this 400 kV
scheme. The transmission capacity is compared to that which can
be obtained through the use of different equipment in the three inter-
mediate stations, such as series capacitors, synchronous capacitors
with series capacitors in the neutral of machine and step-up trans-

successful full-scale trials of the voltage regulators. F. Busemann

08/6

621.315.051.024
 D.C. POWER TRANSMISSION SCHEME: STALINGRAD
 DAM - DOMBASS. V.P. Plunov, A.V. Poyas, A.M. Reider,
 S.S. Rokotyan and Y.E. Turtskil.
 Vestnik, 1958, No. 11, 12-16. In Russian.
 Describes the 800 kV d.c. scheme for transmission of 750 MW
 over 473 km, giving details of the converter connections: 3 con-
 verter groups of 100-120 kV each, with 2 valves per branch in series
 with the three-phase bridge circuits and two valves in series as by-
 pass for each of these groups. Insulation with respect to earth is
 staggered by mounting valve groups on suitably insulated platforms.
 A photograph of a valve and plans of the converter house and the
 outdoor plant are given. Static capacitors are to be used in addition
 to three 37.5 MVAR synchronous condensers. The single-circuit
 overhead line has twin steel-cored Al conductors, (712 mm² Al plus
 83 mm² steel), 400 mm spaced, with steel earth-wire (70 mm²).
 A sketch of a flexible support is given. Material requirement for
 the line is tabulated. The cost of the d.c. scheme is slightly higher
 than for 400 kV a.c., but it was adopted in order to gain experience
 before embarking on 1000-2000 kv schemes.
 F. Busemann

Plunov

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ROKOTYAN, S.S.

ROKOTYAN, S.S.

567. 400 KV TRANSMISSION SYSTEMS IN THE SOVIET UNION. 621.315.051
S.S. Rokotyan and B.P. Lebedev.
Proc. Instr. Elect. Engrs, Paper 2400S, publ. Dec., 1957 (Vol. 104A,
471-84).

The Kulbishev-Moscow line (Abstr. 964/1953 and 4088/1956)
is considered as part of a consolidated power distribution system
for the European part of the U.S.S.R. together with other lines now
under construction. These include also a 400 kv d.c. transmission
line of 500 km length from Stalingrad to Donbas. One of the main
features of the existing system is the use of series-capacitor com-
pensation (Abstr. 3324/1956 and 3388/1956). Details of the trans-
mission line, e.g. a releasing clamp for the conductors, normal sus-
pension and angle strain towers, a step-down transformer, air-blast
circuit-breakers and disconnecting switches are illustrated. Dia-
grams show the general layout of the system and of substations and
their outdoor switchgear. The technical and economic characteris-
tics of the various lines in operation, under construction, and in the
project state, are tabulated. A detailed account is given of the oper-
ating results and the special tests carried out on the existing line.

R. Neumann

L 31825-65

ACCESSION NR AM4043704

BOOK EXPLOITATION

9/

Mel'nikov, Nikolay Aleksandrovich; Rokotyan, Sergey Sergeyevich; Sherentsis, Arnol'd Neumovich

Designing electrical parts of serial lines for electrotransmission from 330 to 500 kv (Proyektirovaniye elektricheskoy chasti vozdukhnykh liniy elektroperedachi 330-500 kv), Moscow, Gosenergoizdat, 1964, 559 p. illus., biblio. 3,000 copies printed.

7
B+1

TOPIC TAGS: electrical distribution system, superhigh voltage, electrical engineering

PURPOSE AND COVERAGE: This book presents experience gained in the USSR and abroad on the design, construction, and use of 330-500 kilovolts electrical transmission lines. The book discusses problems of electrical calculations of electrical transmission and distribution lines.

atmospheric overloads, line construction and other problems connected with the design of 330-500 kilovolts electrical transmission lines are cited. The book is intended for engineers working in the design, construction, and use of

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ACCESSION NR AM4043704

330-500 kilovolts electrical transmission lines and can be useful for power engineering students in the specialty of electrical networks and systems.

TABLE OF CONTENTS [abridged]:

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Ch. I. Experience in the design, construction, and use of superhigh voltage lines -- 19

Ch. II. Electrical transmission schemes and measures to increase their capacity -- 65

Ch. III. Basic parameters of lines and their foundation -- 99

Ch. IIII. Construction of 330-500 kilovolts electrical transmission lines -- 159

Ch. V. Insulation of electrical transmission lines -- 107

Ch. VI. Internal overloads in superhigh-voltage electrical transmission lines -- 222
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Ch. IX. Calculating the most economical regime of electrical transmission -- 367
Ch. X. Incomplete phase regimes of electrical transmission -- 397

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Ch. XI. Selection of the length of transposition cycles of electrical transmission lines -- 424
Ch. XII. Grounding cables in long-range electrical transmission -- 442
Ch. XIII. Compensation of the parameters of electrical transmission lines -- 457
Ch. XIII. Starting regimes of electrical transmission -- 481

ROKOTYAN, S. S., AKOPYAN, A. A., BURGS DORF, V. V., BUTKEVICH, Y. V., GERTSYK, A. K.
GRYUNTAL, Y. L., and SOVALOV, S. A.

Development of 400-500 kV networks in the Soviet Union,
paper submitted for presentation at the Intl. Conf. on Large Electric Systems (CIGRE)
17th biennial Session, Paris, France, 4-14 June 1958.

Electra, No. 30, Nov 57, periodical news letter issued by the CIGRE, Paris France.

POKOTYAN, S.S.

104. DESIGN AND TECHNICAL AND ECONOMIC CHARACTERISTICS OF 400 KV TRANSMISSION SYSTEMS. 31
S.S. Pokotyán

621.315

Elekt. Stantsii, 1957, No. 8, 44-50. In Russian.

Comparison of tabulated characteristics of transmission systems in Russia and elsewhere with those of transmission systems in Sweden, France, Finland, Western Germany and Britain indicates that there is general agreement in the solution of problems in regard to the use of aluminum steel conductors, insulation level, single-circuit supports, storm protection of lines and spacing of conductors and phases. The features of the various national systems are discussed in a brief survey.

Central Electricity Generating Board Digest

NS POW

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1-4E2G

ROKOTYAN, S. [S.] and MIROLYUBOV, A. V.,

"Economic Characteristics of Long Distance Electrical Transmission in the USSR."

report presented at the 14th Sectional Meeting of the World Power Conference, Montreal, Canada, 7-12 Sep 1958.

NEKRASOV, A.M., red.; ROKOTYAN, S.S., red.; BRANDENBURGSKAYA, E.Ya., red.;
VORONIN, K.P., tekhn.red.

[Volga Hydroelectric Power Station - Moscow long-distance
transmission line] Dal'niaia elektropredacha Volzhskaya GES
imeni V.I.Lenina - Moskva; sbornik statei. Moskva, Gos.energ.
izd-vo, 1958. 487 p. (MIRA 11:12)
(Electric lines--Overhead)

ROKOTYAN, S.S., inzh.

First 380 kv. power line in France. Energokhoz. za rub. no. 6:21-
26 M-D '58. (MIRA 12:4)

(France--Electric power distribution--High tension)

NOVOTIAN, S. S., YAKUB, Yu., KRIKUNCHIK, A. B.

"Some problems on long distance power transmission in the USSR"

report to be submitted for Intl. Conference on Large Electric Systems (CIGRE),
18th Biennial Session, Paris, France, 15-25 Jun 60.

Rokotyan, S.S.

8(6)

SOV/112-59-6-6428

Translation from: Referativnyy sbornik. Elektrotekhnika, 1959, Nr 4, p 4 (USSR)

AUTHOR: Vol'berg, D. B., Doroshchuk, V. Ye., Krikunichik, A. B.,
Lebedev, B. P., Pakshver, V. B., Rokotyan, S. S., Sementsov, V. A., and
Serbinovskiy, G. V.

TITLE: General Review of the Power Industry Abroad (1956-1957)

PERIODICAL: Energokh-vo za rubezhom, 1958, Nr 2, pp 1-48

ABSTRACT: Bibliographic entry.

Card 1/1

VOJ'FERG, D.B.; DOROSHCHUK, V.Ye.; KRIKUNCHIK, A.B.; LEBEDEV, B.P.; PAKSHVER,
V.B.; ROKOTYAN, S.S.; SEMENTSOV, V.A. [deceased]; SERBINOVSKIY, G.V.

General aspects. Klok. sta. supplement no. 1:2-4 Ja-F '58.
(MIRA 11:7)

(Power engineering)

AUTHOR: Gershengorn, A. I., Engineer, 105-58-5-2/28
Rokotyan, S. S., Engineer, Sandler, P. Ye., Engineer

TITLE: Comparative Economic Evaluation of A. C. and D. C.
Long-Distance Transmission (Sravnitel'naya
ekonomicheskaya otsenka dal'nikh peredach postoyannogo
i peremennogo toka)

PERIODICAL: Elektrichestvo, 1958, Nr 5, pp. 8-12 (USSR)

ABSTRACT: For the purpose of determining the limits of economy in
using d. c.- and a. c. long-distance transmission, the
Department for Long-Distance Transmission of the
Teploelektroproyekt performed comparative calculations
of equivalent d. c.- and a. c. transmissions. In this
connection the following kinds of transmission were
investigated: 1) Intermediate-system transmissions
without intermediate stations. 2) Transmissions without
intermediate outputs which connect the great hydroelectric
plants with the systems. 3) Transmissions with intermediate
output, which connect great hydroelectric plants with the
power supply systems. It was assumed that the circuits lead

Card 1/4

Comparative Economic Evaluation of A. C. and D. C.
Long-Distance Transmission

105-58-5-2/28

to regions, which correspond to the second glazed-frost region. The wind velocity for the calculation amounted to 30 m/sec. Based on the investigations the following was determined: 1) The circuit length at which the transmission indices of d. c. and a. c. become equal, depend on the power, the quantity of the transmitted energy, the voltage, the transmission type, and the presence of intermediate stations. 2) At a small quantity of the transmitted power and energy (500 MW, 2.5 milliard kw hours/year), the limit of economy for the use of d. c. and a. c. lies within the range of 900 - 1000 km. 3) Equal capital investments for d. c. - and a. c. transmissions are quoted at circuit lengths (without intermediate plants) of not less than 700 - 900 km. An increase of the transmitted power and energy hardly influences the position of the limit of economy with respect to capital investments. 4) The limit of economy with respect to the energy transmission costs shifts in the direction of the greater distances compared to the limit determined according to capital investments. This displacement amounts

Card 2/4

Comparative Economic Evaluation of A. C. and D. C.
Long-Distance Transmission

105-58-5-2/28

to 100 - 400 km, the lower numbers being valid for the transmission of a greater energy. 5) The resulting limit of economy at 750 MW/circuit and more, without intermediate plants, lies at 850 - 1000 km. 6) In the case of an energy transmission from a great hydroelectric plant and a combination of the transformer substation with the electric devices of a hydroelectric plant the limit of economy displaces itself, compared to the boundary for an intermediate-system-transmission with equal limit transformer substations, by about 100 km in the direction of the smaller distances. 7) In varying the costs for the transmitted energy the limit of economy displaces itself by 100 - 150 km. 8) In transmissions with intermediate plants 250 - 300 km each, the limit of economy lies at 1300 - 1500 km, which essentially extends the domain of using a. c. There are 5 figures and 6 tables.

Card 3/4

Comparative Economic Evaluation of A. C. and D. C. 105-58-5-2/28
Long-Distance transmission

ASSOCIATION: Teploelektroproyekt

SUBMITTED: January 10, 1958

AVAILABLE: Library of Congress

1. Electrical networks--Effectiveness 2. Direct current--Transmission
3. Alternating current--Transmission

Card 4/4

AUTHOR: Rokotyan, S.S., Engineer

91-58-8-2/34

TITLE: Adapting 400 kv Electric Transmission Lines to a Tension of 500 kv (Perevod liniy elektroperedachi 400 kv na napryazheniye 500 kv)

PERIODICAL: Energetik, 1958, Nr 8, pp 3-8 (USSR)

ABSTRACT:

To increase the carrying capacity of the Kuybyshev-Moscow and Kuybyshev-Urals Power Lines, and in view of the increase in the capacity of the hydro-generators of the Kuybyshev GES from 105 to 115-120 Mw, it may be necessary in the future to convert the lines from their present 400 kv to 500 kv. The cost of the necessary alterations and the improvement it would make in the carrying capacity of the system are dealt with. For grids of 400 kv and over, the most important criteria are internal overvoltages. The overvoltages on the basic insulation, when shunt reactors are switched in, do not exceed 2.5 times the nominal voltage, and the shunt reactors therefore play a very large part in reducing the magnitude of these internal overvoltages. The overvoltages between the contacts of the breaker switches are higher than those on the basic insulation. Means of lowering internal overvoltages are given and the author points out that only the equipment connected in pa-

Card 1/2

91-58-8-2/34

Adapting 400 kv Electric Transmission Lines to a Tension of 500 kv.

parallel with the grid need be modified. The series circuit equipment could be retained more or less unchanged. There are 2 photos, 1 circuit diagram and 1 table.

1. Transmission lines--Design 2. Transmission lines--Effectiveness

Card 2/2

AUTHOR: Rokotyan, S.S., Engineer SOV-98-58-9-3/21

TITLE: Long Distance Power Transmissions and Hydro-Power Construction (Dal'niye elektropredachi i gidroenergeticheskoye stroitel'stvo)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1958, Nr 9, pp 8 - 13 (USSR)

ABSTRACT: The construction of new powerful hydroelectric power plants, especially those situated far from industrial centers, involves the erection of long overhead transmission lines with steadily increasing tension and carrying capacity. The world's highest tension (500 kilovolt) was realized when the Stalingrad, Bratsk, Krasnoyarsk and Votkinsk Hydroelectric Power Plants were built. The author describes the types of supporting towers for transmission lines of different voltages. Special equipment had to be developed to keep down losses of power during transmission. At present Soviet research laboratories and planning institutes are studying the problems of increasing the carrying capacities of electric transmission systems to 2,000 - 2,500 megawatts on 2,500 km-long lines which will require the use of still higher tension in the order of 650 kilovolts.

Card 1/2

Long Distance Power Transmissions and Hydro-Power Construction SOV-98-58-9-3/21

The utilization of d.c. at the HT for very long transmission of power will cut the cost of erected lines and losses of the electric energy. As the construction of d.c. substations is expensive, the transmission of d.c. is economically expedient over distances of not less than 800 - 1000 km, with a power of at least 750 megawatts. At present d.c. is being experimentally transmitted over the Kashira-Moscow 112 km-long line. Its tension is 100 kilovolts and its carrying capacity - 30 megawatts. Creation of unified power systems for industrial regions of the Union is foreseen in the near future. There are 3 graphs, 1 table, 1 photo, 1 map and 2 Soviet references.

1. Power plants--Construction
2. Power plants--Performance
3. Electricity--Transmission
4. Electrical equipment--Design

Card 2/2

ROKOTYAN, S.S., red.; OZERSKIY, V.A., red.; LARIONOV, G.Ye., tekhn.
red.

[Super-high voltage power transmission lines] Linii elektro-
peredachi sverkhvysokogo napriazheniia; doklady Mezhdunarodnoi
konferentsii po elektricheskim sistemam (GIGRE) 1960 g. Pod
red. S.S.Rokotiana. Moskva, Gos. energ. izd-vo, 1961. 327 p.
(MIRA 15:4)

1. International Conference on Large Electric Systems, 18th,
Paris, 1960.

(Electric power distribution--High tension)

BUKHARIN, Yevgeniy Mikhaylovich; LYALIN, Feliks Isayevich; SANDLER,
Polina Yevseyevna, SHLYAPIN, Igor' Andreyevich; ROKOTYAN,
S.S., red.; DEMKOV, Ye.D., red.; BORUNOV, N.I., tekhn. red.

[Survey and comparison of foreign standards for designing
the structural section of electric power transmission systems]
Obzor i sravnenie zarubezhnykh norm na proektirovaniye konstruk-
tivnoi chasti linii elektropredachi. Pod obshchei red. S.S.
Rokotiana. Moskva, Gos. energ. izd-vo, 1960. 143 p.

(MIRA 14:5)

(Electric power distribution)

ROKOTYAN, S.S.

Different factors in designing overhead high-voltage d.c. power
transmission lines. Izv. NIPT no.6:80-91 '60. (MIRA 14:7)
(Electric power distribution—Direct current)

NEPOROZHNIY, P.S. (Moskva); BELYAKOV, A.A. (Moskva); RUSSO, G.A. (Moskva);
BOROVY, A.A. (Moskva); NEKRASOV, A.M. (Moskva); MILOSLAVSKIY,
N.A. (Moskva); ROKOTYAN, S.S. (Moskva); RAZGON, V.N., inzh.;
TSVERAVA, G.K., inzh. (g.Boksitogorsk)

Principal trends in over-all electrification. Elektrichestvo
no. 11:87-90 N '60. (MIRA 13:12)

1. Mosenergo (for Razgon).
(Electrification)

KRIKUNCHIK, A.B., inzh.; ROKOTYAN, S.S., inzh.; YAKUB, Yu.A., inzh.

Problems concerning the transmission of electric power at
long distances. Elek. sta. 31 no.8:48-54 Ag '60. (MIRA 14:9)
(Electric power distribution)

AKSEL'ROD, M.M.; VIDGON, L.N.; ROKOTYAN, S.S.; TURETSKIY, V.Ye.

Comparison of the economic efficiency of d.c. power transmission
and transportation of gas to electric power plants. Izv. NIPT
no.8:20-31 '61. (MIRA 15:7)
(Electric power distribution--Costs)
(Gas, Natural--Transportation)

ROKOTYAN, S.S., AKOPYAN, A.A., KOSTENKO, M.P., LEVINSHTEYN, M.L., LYSKOV, YU.I.
FOTIN, V.P., SHUR, S.S.

"E.H.V. line internal overvoltages and measures for their limiting."

Report to be submitted for the 19th Biennial Session, Intl. Conference
on large electric systems (cigre), Paris, France, 16-26 May 1962.

AKOPYAN, All-Union Elect. Engineering Inst. im V.I. Lenin, Moscow
KOSTENKO, AS, USSR, Inst. Electromechanics
LEVINSHTEYN, Leningrad Polytechnical Inst. im M.I. Kalinin
LYSKOV, All-Union Scientific Research Planning Inst. Thermoelectric Indust.
ROKOTYAN, Dept. Long Distance Power Transmission, All-Union Inst. Planning
Steam-Electric Stations, Substations and Furnaces
FOTIN, All-Union Elect. Engineering Inst. im V.I. Lenin, Moscow
SHUR, Scientific Research Inst. of Direct Current, Leningrad

AKSEL'ROD, M.M.; ROKOTYAN, S.S.

Engineering and economic ~~indices~~ of d.c. power transmission lines
with intermediate power take-off. Elektroenergetika no.5:120-
128 '62. (MIRA 15:4)
(Electric power distribution--High tension)

ROKOTYAN, S.S., inzh.

Significance of 500 kv networks in the electric power supply of the
U.S.S.R. Energetik 10 no.7:7-10 JI '62. (MIRA 15:7)
(Electric power distribution)

KAFIYEVA, Karine Yakovlevna; ROKOTYAN, S.S., red.; BUL'DYAYEV,
N.A., tekhn. red.

[Interference generated by the corona on electric-power
transmission lines] Pomekhi ot korony na provodakh lini
elektroperedachi. Moskva, Gosenergoizdat, 1963. 144 p.
(MIRA 16:6)

(Corona (Electricity)) (Radio--Interference)

MEL'NIKOV, Nikolay Aleksandrovich; ROKOTYAN, Sergey Sergeyevich;
SHERENTSI, Arnol'd Naumovich; NIKOLAYEVA, M.I., red.;
BUL'DYAYEV, N.A., tekhn. red.

[Design of the electrical section of 330-500 kv. overhead
power transmission lines] Proektirovanie elektricheskoi
chasti vozdukhnykh liniy elektroperedachi 330-500 kv. Mo-
skva, Gosenergoizdat, 1963. 559 p. (MIRA 17:4)

NEPOROZHNIY, P.S. (Moskva); BELYAKOV, A.A. (Moskva); RUSSO, G.A. (Moskva);
BUROVOY, A.A. (Moskva); NEKRASOV, A.M. (Moskva); ROKOTYAN, S.S.
(Moskva); MILOSLAVSKIY, N.M. (Moskva); SYROMYATNIKOV, I.A.,
doktor tekhn. nauk, prof.

Principal trends in the realization of over-all electrification.
Elektrichestvo no.8:77-82 Ag '63. (MIRA 16:10)

LYSKOV, Yu.I., inzh.; ROKOTYAN, S.S., inzh.

Protection from overvoltage of 500 kv. long-distance power
transmission lines. Elek. sta. 34 no.3:54-59 Mr '63.
(MIRA 16:3)

(Electric power distribution)
(Electric protection)

NEKRASOV, A.M., red.; ROKOTYAN, S.S., red.; NIKOLAYEVA, M.I.,
red.

[500 Kv. long-distance power transmission lines] Dal'nie
elektroperedachi 500 kv.; sbornik statei. Moskva, Izd-vo
"Energiia," 1964. 389 p. (MIRA 17:5)

AKOPYAN, A. A.; ALEKSANDROV, G. N.; YEMELIANOV, N. P.; LEVITOV, V. I.; MIROLYUBOV, A. V. //
NAYASHKOV, I. S.; PANOV, A. V.; POPKOV, V. I.; ROKOTYAN, S. S.; SOKOLOV, N. N.;
TIKHODEYEV, N. N.

"The 750 kV Experimental Commercial Transmission Line Konakovo-Moscow."

report submitted for Intl Conf on Large Electric Systems, 20th Biennial Session,
Paris, 1-10 Jun 64.

AKOPYAN, A. A.; ALEKSANDROV, YEMEL'YANOV, N. P.; LEVITOV; MIROLYUBOV, NAYASHKOV, I. S.;
PANOV, A. V.; POPKOV, V. I.; ROKOTYAN, S. S.; SOKOLOV, N. N.; TIKHODEYEV, N. N.

"The 750 kV Experimental Commercial Transmission Line Konakovo-Moscow."

report submitted for 20th Biennial Sess, Intl Conf on Large Electric Systems,
Paris, 1-10 Jun 64.

L 41141-65 EWT(1)

MISSION NR: AP5000962

S/0104/64/000/005/0060/0067

AUTHOR: Ly*skov, Yu. I. (Engineer); Sokolov, N. N. (Engineer);
Rokotyan, S. S. (Engineer)

TITLE: Long-distance power transmission at 750 kv

SOURCE: Elektricheskiye stantsii, ^{Vol. 35} no. 5, 1964, 60-67

TOPIC TAGS: power transmission, power transmission line, power transmission line 750 kv

ABSTRACT: Various design considerations regarding 750-kv power transmission lines are reported. Such lines have been tentatively designed for the future 4,500-Mw Bratsk, 5,000-Mw Krasnoyarsk, and other superpower hydroelectric stations. With rated 750 kv and a maximum operating voltage of 787 kv, the maximum permissible internal overvoltage is set at 2.1 U, where U is the rated phase-to-ground voltage. Four aluminum cables per phase (ASO-600 or ASO-700)

L 41141 -65

ACCESSION NR: AP5000962

are envisaged on the basis of corona loss, conductor load, radio interference, etc. D-c 750-kv lines are found to be suitable for longer distances and higher powers. Power reactors connected via switches and air gaps at both ends of the line are suggested to limit surges, control reactive power, and help in synchronization. Reactors as well as magnetic-valve lightning arresters capable of carrying 7--10 ka are jointly envisaged. Economic rough estimates are also supplied. Orig. art. has: 2 figures, 1 formula, and 4 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: EE, PR

NO REF SOV: 006

OTHER: 000

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Card 2/2

L 6925-66 EWT(1)/EWA(h)

ACCESSION NR: AP5000962

S/0104/64/000/005/0060/0067

AUTHOR: Ly*skov, Yu. I. (Engineer); Sokolov, N. N. (Engineer);
Rokotyan, S. S. (Engineer)

TITLE: Long-distance power transmission at 750 kv

SOURCE: Elektricheskiye stantsii, no. 5, 1964, 60-67

TOPIC TAGS: power transmission, power transmission line, power transmission line 750 kv

ABSTRACT: Various design considerations regarding 750-kv power transmission lines are reported. Such lines have been tentatively designed for the future 4,500-Mw Bratsk, 5,000-Mw Krasnoyarsk, and other superpower hydroelectric stations. With rated 750 kv and a maximum operating voltage of 787 kv, the maximum permissible internal overvoltage is set at 2.1 U, where U is the rated phase-to-ground voltage. Four aluminum cables per phase (ASO-600 or ASO-700)

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L 6925-66

ACCESSION NR: AP5000962

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ASSOCIATION: none

SUBMITTED: 00

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OTHER: 000

Cord. 2/2

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